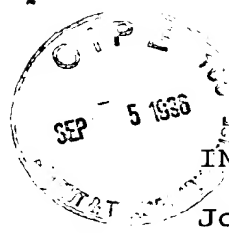


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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT  
APPEALS & INTERFERENCES



IN RE APPLICATION OF

Joseph Hummel

Serial No.: 08/424,223

Art Unit: 3500

Filed: April 19, 1995

Examiner: W. G. Grylewski

For: KNITTABLE YARN AND SAFETY APPAREL

Docket: 10-142C3

Watts, Hoffmann, Fisher & Heinke  
PO Box 99839  
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Assistant Commissioner for Patents  
Washington, D.C. 20231

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BOARD OF PATENT APPEALS  
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APPELLANT'S REPLY TO EXAMINER'S ANSWER

A. The Examiner's Answer in this appeal raises the following new points of argument:

1. That the inclusion of low strength polyester fiber in the Robins et al. reference teaches the use of Vectran M fiber.
2. That the applicant's declarations are deficient.
3. That the examiner can withdraw from consideration statements of the previous examiner relating to the issue on appeal.

B. Applicant replies to the new points of argument as follows:

1. The new argument that the inclusion of low strength polyester fiber in the Robins et al. reference teaches the use of Vectran M fiber.

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September 3, 1996  
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Noted  
5/12/97  
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It is apparent from the several times the examiner presents this new argument that he regards it as a primary basis for concluding obviousness of the invention. The examiner states that nowhere in the Robins et al. specification does it teach only the use of high strength filament; rather, it discloses in claims 8 and 18 a polyester fiber that is a low strength fiber (Examiner's Answer, bottom of p.5, middle and bottom of p.6, top of p.7, and bottom of p.8). The examiner concludes from this disclosure that it would therefore be obvious to substitute low tenacity Vectran M for a high tenacity fiber such as Kevlar in yarns that rely on the Kevlar for cut-resistance.

This issue was never previously raised, and rightly so. There is no logical basis for contending that the known practice of including low tenacity fibers along with high tenacity fibers in cut-resistant yarns, suggests using low tenacity fibers to provide high cut-resistance.

The use of polyester and other low tenacity fibers in cut-resistant yarns has been common and well known. It is also well known that polyester is not cut-resistant and its use in cut-resistant yarn is to provide bulk and comfort, not cut-resistance. See, e.g., the outer wraps of nylon or polyester used in the cut-resistant yarn of the cited Bettcher patent 4,470,251. The known lack of high cut-resistance of polyester is shown by applicant's declarations.

The use of polyester contemplated in Robins et al. or Bettcher in no way suggests that low tenacity fiber provides the cut resistance of high tenacity fibers such as Kevlar. No equivalency is shown by Robins et al. among the high strength Kevlar, Spectra and Vectran on the one hand and low strength polyester on the other, for cut-resistance, and such equivalency does not exist. It is this lack of high cut-resistance associated with low tenacity fibers that makes the discovery of high cut-

resistance achieved with low tenacity Vectran M unobvious and supports the patentability of the claimed invention.

In short, Vectran M achieves high cut-resistance in yarn constructions. Low tenacity polyester fiber does not. It therefore cannot suggest the use of low tenacity fiber for cut-resistance.

2. The new argument that the applicant's declarations are deficient:

The comments about the Second Supplemental Rule 132 declaration filed June 27, 1996 (sic June 17) (page 9 of the Examiner's Answer) are inapt. All of the questions were answered in the first Supplemental Rule 132 Declaration filed January 18, 1996, which was considered by the examiner, as indicated in the Office action Paper No. 22. The declaration dated April 13, 1995 and filed April 19, 1995 does have a third column in paragraph 7. The original column was incorrect, but the error was not critical to the point being made: that Vectran M has low tenacity comparable to polyester, the factor recognized in the industry and patents as correlating with cut-resistance. See, e.g., the patent to Kolmes et al. No. 4,936,085 of record pointing out that the fibers disclosed that provide cut-resistance have a tenacity greater than 10 grams per denier, while other fibers referred to (nylon and polyester) have a tenacity lower than 10 grams per denier and are not considered cut-resistant. In view of the fact that the examiner only considered the declaration unpersuasive because of the failure to answer the questions asked, it is assumed that because the questions were answered the declaration will be considered persuasive. This is especially true when the nature of the questions is considered. They related essentially to factors that would not bear on the relevance of the data or thrust of the declaration, since it was expressly stated that the samples were all prepared in the same manner. The evidence set forth is

straightforward.

3. The new assertion that the examiner can withdraw from consideration statements of the previous examiner relating to the issue on appeal:

The remarks made by the former examiner referred to in applicant's brief (bottom of page 10) are in issue, contrary to the statement made by the examiner on page 10 of his Answer. The remarks are part of the record and a change of examiners does not purge the record.


Presumably the new examiner does not want to rely upon the argument. That is understandable. Nevertheless, the observation by the previous examiner bears on the issue of obviousness and is evidence of what an expert in the art would surmise one of ordinary skill in the art would conclude from the prior art. Applicant submits that the former examiner's conclusion that a lesser tenacity fiber would be used where less strength (cut-resistance) is desired is correct, and the corollary proves the unobviousness of applicant's invention. This evidence cannot be dismissed and the attempt to do so is inappropriate.

The rejected claims are properly allowable and the rejections must be reversed.

C. Appellant calls to the Board's attention that the issue of patentability of using low strength fibers of liquid crystal polymer (Vectran M) in cut-resistant yarn is present in two later filed appeals, one in a related divisional application Serial No. 08/468,880 (10-142C3D1) and another in commonly owned application Serial No. 08/206,022 (12-217C2).

Respectfully submitted,

Dated: Sept 3, 1996

  
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